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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/929,110

Applicant(s)

HAINO ET AL.

Examiner

NIGAR CHOWDHURY

Art Unit

2621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C2)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 12/13/2007 have been fully considered but they are not persuasive.
2. In re page 10-11, applicant argues that Okada fails to disclose "first managing control information" based on "second managing control information" recited in amendment independent claims 1, 7 and 12.

In response, the examiner respectfully disagrees. Okada discloses from col. 14 lines 34-39 that "Information for VOB#1-VOB#3 is recorded in an RTRW management file....the volume area", col. 77 lines 12-col. 78 lines 56 that "The original PGC information table....indicates either the VOBs that are stored in a AV file present in the RTRW directory....Each set of original PGC information corresponds to one of the VOBs recorded in an AV file present in the RTRW directory, so that when an AV file is recorded in the RTRW directory, sets of original PGC information are generated by the video data editing apparatus and recorded in the RTRW management file....VOB_ID....C_V_S_PTM....C_V_E_PTM....." and fig. 6B-H, col. 17 lines 65-col. 18 lines 40, col. 23 lines 60-col. 24 lines 45 that "Fig. 6B.....VOB originally includes VOB#1, VOB#2....VOB is composed of a pack header, a system header, a packet header....", "The information for the buffer control describe ...6F....pack header includes a Pack_Start_Code, an SCR....Program_max_rate.....6H.....includes a DTS..., a PTS....". Okada teaches first managing control information which is RTRW

management file and second management control information which is DTS and PTS in packet header. Packet header recorded in different area than RTRW management file area and first managing control information (RTRW) generated on the basis of the second managing control information (VOB). Therefore, RTRW and VOB meets the newly added limitation of independent claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1, 4, 7, 10, 12, 15 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent No. 6148140 by Tomoyuki Okada.
4. Regarding **claim 1**, Okada teaches an information recording apparatus for recording information in a recordable recording medium (See Fig. 17) in conformity to a recording format for a recording medium for reproduction only (See Col. 76 line 37-42), the recording format defining at least unit recording information (See Col. 34 line 61-65) and first managing control information (fig. 4A, 12, 70, col. 14 lines 34-39, col. 77 lines

12-col. 78 lines 56), the unit recording information including recording information to be reproduced and reproduction control information for controlling a reproduction mode of the recording information, the first managing control information controlling the reproduction of one or a plurality of unit recording information, the apparatus comprising:

- A first recording device (See Fig. 17, Col. 34 line 51) for recording unit recording (See Col. 34 line 61-65) information in recordable recording medium
- A first generating device (See Fig. 17, Col. 34 line 50-55) for, generating second managing control information corresponding to the number of the recorded unit recording information (fig. 6, col. 17 lines 65-col. 18 lines 40, col. 23 lines 60-col. 24 lines 45).
- A second generating device for generating the first managing control information (fig. 4A, 12, 70, col. 14 lines 34-39, col. 77 lines 12-col. 78 lines 56) on the basis of the generated second managing control information (fig. 6, col. 17 lines 65-col. 18 lines 40, col. 23 lines 60-col. 24 lines 45)
- A second recording device (See fig. 17, col. 34 line 51) for recording generated second managing control information (VOB), and then recording first managing control information in an area different from an area where second managing control information is recorded in the recordable recording medium (See Col. 14 line 14-17).

5. Regarding **claim 4**, the information recording apparatus further comprising a third recording device (See Fig. 17 (70)) for generating (See Fig. 17 (1, 2, 7, 3)) first managing control information by using recorded second managing control information and recording it in recordable recording medium when the recording of recording information in recordable recording medium is terminated (See Fig. 84, Col.94 line 12-67, Col. 95 line 1-8).

6. Regarding **claim 7**, Okada teaches an information recording method for recording information in a recordable recording medium (See fig. 17) in conformity to a recording format for a recording medium for reproduction only (See col. 76 line 37-42), the recording format defining at least unit recording information (See col. 34 line 61-65) and first managing control information (fig. 4A, 12, 70, col. 14 lines 34-39, col. 77 lines 12-col. 78 lines 56), the unit recording information including recording information to be reproduced and reproduction control information for controlling a reproduction mode of the recording information, the first managing control information controlling the reproduction of one or a plurality of unit recording information.

- A first recording process (See fig. 17, col. 34 line 51) for recording unit recording (See col. 34 line 61-65) information in recordable recording medium
- A first generating process (See Fig. 17, Col. 34 line 50-55) for, generating second managing control information corresponding to the number of the

recorded unit recording information (fig. 6, col. 17 lines 65-col. 18 lines 40, col. 23 lines 60-col. 24 lines 45).

- A second generating device for generating the first managing control information (fig. 4A, 12, 70, col. 14 lines 34-39, col. 77 lines 12-col. 78 lines 56) on the basis of the generated second managing control information (fig. 6, col. 17 lines 65-col. 18 lines 40, col. 23 lines 60-col. 24 lines 45)
- A second recording process (See Fig. 17, Col. 34 line 51) for recording generated second managing control information (VOB), and then recording first managing control information in an area different from an area where second managing control information is recorded in the recordable recording medium (See Col. 14 line 14-17).

7. Regarding **claim 10**, the information recording method further comprising a third recording process (See Fig. 17 (70)) for generating (See Fig. 17 (1, 2, 7, 3)) first managing control information by using recorded second managing control information and recording it in recordable recording medium when the recording of recording information in recordable recording medium is terminated (See Fig. 84, Col.94 line 12-67, Col. 95 line 1-8).

8. Regarding **claim 12**, Okada shows a recording medium in which a recording control program is recorded capable of being read by a recording computer (See Fig. 17

(1), Col. 1 line 13) an information recording apparatus for recording information in a recordable recording medium (See Fig. 17) in conformity to a recording format for a recording medium for reproduction only (See Col. 76 line 37-42), the recording format defining at least unit recording information (See col. 34 line 61-65) and first managing control information (fig. 4A, 12, 70, col. 14 lines 34-39, col. 77 lines 12-col. 78 lines 56), the unit recording information including recording information to be reproduced and reproduction control information for controlling a reproduction mode of the recording information, the first managing control information controlling the reproduction of one or a plurality of unit recording

- A first recording device (See Fig. 17, Col. 34 line 51) for recording unit recording (See Col. 34 line 61-65) information in recordable recording medium
- A generating device (See Fig. 17, Col. 34 line 50-55) for, generating second managing control information corresponding to the recorded unit recording information (fig. 6, col. 17 lines 65-col. 18 lines 40, col. 23 lines 60-col. 24 lines 45).
- A second generating device for generating the first managing control information (fig. 4A, 12, 70, col. 14 lines 34-39, col. 77 lines 12-col. 78 lines 56) on the basis of the generated second managing control information (fig. 6, col. 17 lines 65-col. 18 lines 40, col. 23 lines 60-col. 24 lines 45)

- A second recording device (See Fig. 17, Col. 34 line 51) for recording generated second managing control information (VOB), and then recording first managing control information in an area different from an area where second managing control information is recorded in the recordable recording medium (See Col. 14 line 14-17).

9. Regarding **claim 15**, the recording control program causes the recording computer to further function as a third recording device (See Fig. 17 (70)) for generating (See Fig. 17 (1, 2, 7, 3)) first managing control information by using recorded second managing control information and recording it in recordable recording medium when the recording of recording information in recordable recording medium is terminated (See Fig. 84, Col.94 line 12-67, Col. 95 line 1-8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 2, 3, 5, 8, 9, 11, 13, 14, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6148140 to Tomoyuki Okada, in view of U.S. Patent No. 6501727 to Mitsuyuki Nozaki.

11. **Claim 2** introduces recording of reproduction of control information to the combination of claim 1. Okada teaches a first recording device which records the recording information and second recording device which records second managing control information. Okada fails to teach recording of reproduction control information after recording information is recorded; tentative control information is recorded between recording information and reproduction control information.

Nozaki teaches (in Col. 9 line 58-62) after recording information is recorded in a first recording device, records reproduction control information corresponding to the recording information in an area on recordable recording medium, and also area detected ahead of the recording information (See Col. 1 line 62-64); second recording device records second managing control information in an area on recordable recording medium, area located between the area in which recording information is recorded and the area in which reproduction control information is recorded (See Col. 6 line 25-28. Nozaki said information can be recorded in any order so it could be the order applicant claimed).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have recording of reproduction control information after recording information is recorded; second managing control information is recorded between recording information and reproduction control information.

12. **Claim 3** introduces editorial device and generating device to the combination of claim 2. An editorial device is disclosed in Tomoyuki Okada (See Col. 1 line 11-15) for

carrying out the editorial processing to change the reproduction content of recording information which has been already recorded in recordable recording medium (See Col. 3 line 64-67, Col. 4 line 1-18).

- Generating device is disclosed in Tomoyuki Okada (See Fig. 17 (1, 2, 7, 3)) newly generates second managing control information corresponding to the content of recording information after the editorial processing; and
- Second recording device is disclosed in Tomoyuki Okada (Fig. 17 (70)) records newly generated second managing control information in a vacant area on recordable recording medium (See Col. 14 line 34-39).

13. Regarding **claim 5**, applicant introduces a third recording device in addition to claim 4. Okada teaches a third recording device records (See Fig. 17 (70)) generated first managing control information in an area on recordable recording medium. Okada fails to teach the area detected ahead of the unit recording information. Nozaki teaches (in Col. 9 line 58-62) area is reserved before recording. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a area reservation before records the recording information in the recording medium.

14. **Claim 8** introduces recording of reproduction of control information to the combination of claim 7. Okada teaches a first recording process which records the recording information and second recording process which records second managing

control information. Okada fails to teach reproduction control information which records after recording information is recorded; tentative control information which records between recording information and reproduction control information.

Nozaki teaches (in Col. 9 line 58-62) after recording information is recorded in a first recording process, records reproduction control information corresponding to the recording information in an area on recordable recording medium, and also area detected ahead of the recording information (See Col. 1 line 62-64); second recording process records second managing control information in an area on recordable recording medium, area located between the area in which recording information is recorded and the area in which reproduction control information is recorded (See Col. 6 line 25-28. Nozaki said information can be recorded in any order so it could be the order applicant claimed).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have recording of reproduction control information after recording information is recorded; second managing control information is recorded between recording information and reproduction control information.

15. **Claim 9** introduces editorial process and generating process to the combination of claim 8. An editorial process is disclosed in Tomoyuki Okada (See Col. 1 line 11-15) for carrying out the editorial processing to change the reproduction content of recording information which has been already recorded in recordable recording medium (See Col. 3 line 64-67, Col. 4 line 1-18).

- First generating process is disclosed in Tomoyuki Okada (See Fig. 17 (1, 2, 7, 3)) newly generates second managing control information corresponding to the content of recording information after the editorial processing; and
- Second recording process is disclosed in Tomoyuki Okada (Fig. 17 (70)) records newly generated second managing control information in a vacant area on recordable recording medium (See Col. 14 line 34-39).

16. Regarding **claim 11**, applicant introduces a third recording process in addition to claim 10. Okada teaches a third recording process records (See Fig. 17 (70)) generated first managing control information in an area on recordable recording medium. Okada fails to teach the area detected ahead of the unit recording information. Nozaki teaches (in Col. 9 line 58-62) area is reserved before recording. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have an area reservation before records the recording information in the recording medium.

17. **Claim 13** introduces recording of reproduction of control information to the combination of claim 12. Okada teaches a first recording device which records the recording information and second recording device which records second managing control information. Okada fails to teach recording of reproduction control information

after recording information is recorded; tentative control information is recorded between recording information and reproduction control information.

Nozaki teaches (in Col. 9 line 58-62) after recording information is recorded in a first recording device, records reproduction control information corresponding to the recording information in an area on recordable recording medium, and also area detected ahead of the recording information (See Col. 1 line 62-64); second recording device records second managing control information in an area on recordable recording medium, area located between the area in which recording information is recorded and the area in which reproduction control information is recorded (See Col. 6 line 25-28. Nozaki said information can be recorded in any order so it could be the order applicant claimed).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have recording of reproduction control information after recording information is recorded; second managing control information is recorded between recording information and reproduction control information.

18. **Claim 14** introduces editorial device and generating device to the combination of claim 13. The recording control program causes the recording computer (See Fig. 17 (1), Col. 1 line 13) to further function as an editorial device is disclosed in Tomoyuki Okada (See Col. 1 line 11-15) for carrying out the editorial processing to change the reproduction content of recording information which has been already recorded in recordable recording medium (See Col. 3 line 64-67, Col. 4 line 1-18).

- First generating device is disclosed in Tomoyuki Okada (See Fig. 17 (1, 2, 7, 3)) newly generates second managing control information corresponding to the content of recording information after the editorial processing; and
- Second recording device is disclosed in Tomoyuki Okada (Fig. 17 (70)) records newly generated second managing control information in a vacant area on recordable recording medium (See Col. 14 line 34-39).

19. In **claim 16**, applicant introduces a third recording medium in addition to claim 15. Okada teaches a third recording device records (See Fig. 17 (70)) generated first managing control information in an area on recordable recording medium. Okada fails to teach the area detected ahead of the unit recording information. Nozaki teaches (in Col. 9 line 58-62) area is reserved before recording. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a area reservation before records the recording information in the recording medium.

20. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6501727 to Mitsuyuki Nozaki, in view of U.S. Patent No. 6553180 to Shinichi Kikuchi.

21. Regarding **claim 6**, Nozaki teaches recording format based on a DVD video standard (Col. 1 line 32), recordable recording medium is a DVD-R (Col. 6 line3). Nozaki fails to teach VTSI and VMGI. Kikuchi teaches VTSI (video title set information) in Fig. 4Col. 11 line 17-19. Kikuchi also teaches VMGI in Fig 5, Col. 12 line35-38, Col. 49 line 66, 67, Col. 50 line 1, 2.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have VTSI and VMGI in a recording format to record control information.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIGAR CHOWDHURY whose telephone number is (571)272-8890. The examiner can normally be reached on 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NC
03/09/2008

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621